









13. The data storage device as claimed in claim 12, wherein the reduced-quality I-frames in the fast-reverse file are copies of the reduced-quality I-frames in the fast-forward file.

14. The data storage device as claimed in claim 12, wherein each GOP in the fast-forward file and the fast-reverse file includes at least one freeze frame.

15. The data storage device as claimed in claim 12, wherein each I frame in the main file, in the fast-forward file, and in the fast-reverse file, includes a plurality of 8x8 blocks, the 8x8 blocks each having a variable number of non-zero AC discrete cosine transform (DCT) coefficients, the non-zero AC DCT coefficients of each 8x8 block in an I frame of the fast-forward file and of the fast-reverse file also appear in a corresponding 8x8 block of a corresponding I frame of the main file, and wherein a limited number of the non-zero ACT DCT coefficients in the 8x8 blocks of the I frames in the main file appear in the corresponding 8x8 blocks of the corresponding I frames in the fast-forward file and the fast-reverse file.

16. The data storage device as claimed in claim 15, wherein no more than about nine AC DCT coefficients per 8x8 block are included in the I-frames of the fast-forward file and the fast-reverse file.

17. The data storage device as claimed in claim 12, wherein the fast-forward file and the fast-reverse file share a volume with the main file, and the volume includes an index





